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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,311	04/16/2004	Yoshiaki Hirai	119471	7746
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ALEXANDRIA, VA 22320				
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			3714	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/825,311	HIRAI, YOSHIAKI	
	Examiner	Art Unit	
	Victor Cheung	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 June 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 June 2007 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's response filed 06/07/2007 amended claims 1-14.

Claims 1-14 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A "data signal embodied in a carrier wave" is claimed. Data signals and carrier waves, even though the information encoded within them may be functional, do not fall under any of the four statutory categories set forth by 35 U.S.C. 101 or any of the three categories of nonstatutory subject matter currently specified by the Supreme Court.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5, 13, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re Claim 5: Claim 5 contains the limitation “capable of arriving fastest to the sample points” in line 3. The phrase is indefinite as each character is in fact “capable of” achieving that property. It is suggested that the phrase read as something similar to –with the fastest calculated time--.

Re Claim 13: Claim 13 includes the limitation of “A computer-executable storage medium that receives a data signal embodied in a carrier wave, comprising information used for executing the method as claimed in claim 1.” It is unclear what is being claimed. The computer-executable storage medium is not encoded with anything, thus it is unclear how the method of claim 1 can be executed. A data signal is claimed; see 35 U.S.C. 101 rejection above.

Re Claims 13-14: Claims 13 and 14 each claim a storage medium that receives or stores something used for executing the method as claimed in claim 1. It is unclear if an apparatus (computer-executable storage or computer-readable storage) or method (receives or stores) is being claimed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-11, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupert et al. (US Patent No. 6,558,258) in view of Rimoto et al. (US Patent No. 6,503,144).

Re Claim 1: Rupert et al. disclose a game performing method for executing a game by controlling movements of characters constituting a character group comprising setting a plurality of sample points in a game space (Col. 4, Lines 55-64), calculating positions of the characters after a prescribed time when the characters keep a present moving situation (Col. 6, Lines 27-32), recognizing areas pertaining to a power of the character group to the samples points (Col. 6, Lines 60-65; Col. 4, Lines 58-64; and Col. 8, Lines 47-51), and controlling the movements of the characters in the game space (Col. 7, Lines 1-3).

However, Rupert et al. do not specifically disclose calculating arrival times of the characters to the plurality of sample points from the calculated positions as starting points.

Rupert et al. disclose that the Voronoi regions used are a collection of points that a character is closest to. The player may be closest in distance, or the player may be closest based on non-linear measurements such as momentum, speed, and direction (Col. 4, Lines 58-64; Col. 6, Lines 27-40).

Rimoto et al. teach a method of executing a game including determining the time required for each of the players to reach a specific point (Col. 2, Lines 25-27, 34-39).

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to calculate the arrival times of the characters to the plurality of sample points from the calculated positions as starting points. The Voronoi regions depict areas that the character is able to reach faster than any other character, i.e. it is the result of a comparison of the arrival times of the characters. Through calculating the arrival times of the characters, it can be more easily determined which characters can reach an area faster, using a metric that takes into account the players ability to reach the point faster, instead of a linear metric such as distance.

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Re Claim 2: Rupert et al., modified by Rimoto et al., teach the use of arrivals times and the limitations of claim 1, as discussed above.

Rupert et al. also teach that the Voronoi regions depict regions which a character is closest to, either by a linear or non-linear measurement (Col. 4, Lines 58-64). As also discussed in claim 1, the power of the group is determined (Col. 8, Lines 47-51).

Re Claim 3: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 1, as discussed above.

Rupert et al. also teach that the Voronoi regions depict regions which a character is closest to, either by a linear or non-linear measurement (Col. 4, Lines 58-64). The Voronoi regions divide the entire pitch, depicting the power areas of a first character group and the power areas of a second character group. The power areas of the second group are the non-power areas of the first character group, and vice versa.

Re Claims 4 and 5: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 3, as discussed above.

However, Rupert et al. do not specifically disclose setting movement target positions within the recognized non-power areas, wherein the controlling the movements of the characters includes moving the characters to the movement target positions.

Rupert et al. also teach that the use of the Voronoi regions can arbitrarily be set and designed for any type of purpose. One use is to determine which character will defend which opponent character. In this situation called marking, a defending player moves to guard an opponent. (Col. 8, Lines 15-66)

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to set movement target positions in non-power areas, and then control the movements of the characters to the movement target positions. When a character is set to defend an opponent character, the character should move towards the opponent character, creating a life-like situation as in a real sport game.

Re Claim 6: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 1, as discussed above.

Rupert et al. also teach that one character can be selected to be controlled in a situation such as when the character is closer to an opponent's goal than the offensive line in a soccer game, the character will be given specific instructions and will run in the direction of the goal (Col. 7, Lines 6-15).

Re Claim 7: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 6, as discussed above.

Rupert et al. also teach that the game is a compete-type game in which an attacking direction of the character group is previously determined (Fig. 5; Col. 6, Lines 43-59; Col. 7, 6-15), and selecting the character to be the object of control includes consideration of the attacking direction of the character group (Col. 7, Lines 6-15).

Re Claim 8: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 6, as discussed above.

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Rupert et al. also teach that the game is a ball game (Fig. 1), and selecting the character to be the object of control with consideration of a position of a ball in the game space (Col. 5, Lines 10-17).

Re Claims 9 and 10: Note that claim 10 is nearly identical to claim 9 except that the controlling the movements of the first character group is based on the power of the first character group, and the controlling the movements of the second character group is based on the second character group.

Rupert et al., as modified by Rimoto et al., teach the limitations of claim 1, as discussed above.

Rupert et al. also teach that the character group can include a Team A and a Team B (Fig. 1; Col. 7, Lines 7-11), the power of each of the character groups is based on the calculated times of each group to reach their respective sample points (Col. 5 Line 66-Col. 6 Line 10), and that the controlling of the movement of an offensive player can be such to adapt to power areas of both teammates and opponents (Col. 7, Lines 6-35) whereas the controlling of the movement of a defensive player can be such to decide which defensive player should defend against which offensive player (Col. 8, Lines 15-20). Also, as is well known in the game of soccer, each team can change from the offense group to the defense group, or change from the defense group to the offense group.

Re Claims 11 and 14: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 1, as discussed above.

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Rupert et al. also teach a storage medium having program code recorded thereon for making an operating device execute the method of claim 1 (Fig. 2, Reference Nos. 112 and 120; Col. 4, Lines 4-13).

Re Claim 13: Rupert et al., as modified by Rimoto et al., teach the limitations of claim 1, as discussed above.

Rupert et al. also teach that data may be obtained over a network or electronic channel for executing the method as claimed in claim 1 (Col. 4, Lines 12-13).

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupert et al. (US Patent No. 6,558,258) and Rimoto et al. (US Patent No. 6,503,144) as applied to claim 1 above, and further in view of Takatsuka (US Patent No. 6,149,520).

Note that as claimed, claim 12 sets forth a game apparatus with sections for executing the gaming method of claim 1.

Rupert et al., as modified by Rimoto et al., teach the limitations of claim 1, as discussed above. Rupert et al. also teach a computer game hardware system comprising a console (Fig. 2, Reference No. 102) comprising a processor (Fig. 2, Reference No. 110), program code storage (Fig. 2, Reference No. 112), and graphics processor (116) for executing the method of claim 1.

However, they do not specifically teach a point setting section, an inertia calculation section, an arrival time calculation section, an area recognition section, and a movement control section.

Takatsuka teaches a game apparatus for controlling a character in a video soccer game, including calculating a character's future position, calculating angles and distances between a

character and the ball and an opponent character, including different sections for each of the processing and calculating method steps (Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a section of the processor of Rupert et al. be used for each method step. By having a section for each step that has to be calculated, the entire process can be pipelined and work faster and more efficiently.

Response to Arguments

9. Applicant's arguments, see page 14, filed 06/07/2007, with respect to the rejections of claims 1 and 12 under 35 U.S.C. 102 and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rupert et al. (US Patent No. 6,558,258) and Rimoto et al. (US Patent No. 6,503,144) as applied to claim 1, and further in view of Takatsuka (US Patent No. 6,149,520) as applied to claim 12.

However, note that regarding applicant's argument that Rupert et al. do not recognizing areas pertaining to a power of the character group, Rupert et al. do disclose that variations to the Voronoi diagrams can be made, including making designations towards a team's cells, giving the player the ability to see points that the team, as a whole, owns. (Col. 8, Lines 47-51).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Cheung whose telephone number is (571) 270-1349. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VC
Victor Cheung
August 16, 2007

Ronald Leneau
RONALD LANEAU
PRIMARY EXAMINER

8/20/07